

WHAT IS CLAIMED IS:

1. A fan structure comprising a hub, a motor located inside the hub, a plurality of fan blades connected to the hub, and a circuit board connected to the motor, wherein the circuit board comprises:

5 a circuit region provided on a first surface of the circuit board, the circuit region comprising at least one heat-generating component thereon; and
 a heat-dissipative film coated on an edge portion of the first surface and in contact with the heat-generating component.

10 2. The fan structure as claimed in claim 1, wherein the circuit region is surrounded by the heat-dissipative film.

3. The fan structure as claimed in claim 1, wherein the heat-dissipative film extends outside the circumference of the hub.

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4. The fan structure as claimed in claim 1, wherein the heat-dissipative film is formed with a plurality of openings.

5. The fan structure as claimed in claim 1, further comprising a heat sink located on a
20 second surface of the circuit board opposite to the first surface of the circuit board.

6. The fan structure as claimed in claim 5, wherein the heat sink is connected to the heat-dissipative film by means of a plurality of through holes and a fastening portion.

7. The fan structure as claimed in claim 1, wherein the first surface of the circuit board comprises a protrusion for carrying the heat-generating component and optionally the heat-dissipative film, and the protrusion extends outside the circumference of the hub.

5 8. The fan structure as claimed in claim 7, wherein the protrusion has a cutout that extends from a tip of the protrusion to the heat-generating component.

9. The fan structure as claimed in claim 7, wherein the protrusion has a cutout that extends over a portion of the heat-generating component so that the portion of the
10 heat-generating component is exposed via the cutout in the protrusion.

10. A fan structure comprising a hub, a motor located inside the hub, a plurality of fan blades connected to the hub, and a circuit board connected to the motor, wherein the circuit board comprises a protrusion, which extends outside the circumference of the hub
15 and carries thereon a heat-generating component.

11. The fan structure as claimed in claim 10, wherein the protrusion further comprises a cutout that extends from a tip of the protrusion to the heat-generating component.

20 12. A circuit board for operating a fan, comprising:

a circuit region provided on a first surface of the circuit board and including at least one heat-generating component thereon; and

a heat-dissipative film coated on an edge portion of the first surface and in contact with the heat-generating component.

13. The circuit board as claimed in claim 12, wherein the circuit region is surrounded by the heat-dissipative film.

5 14. The circuit board as claimed in claim 12, wherein the heat-dissipative film is formed with a plurality of openings.

15. The circuit board as claimed in claim 12, further comprising a heat sink provided on a second surface of the circuit board opposite to the first surface of the circuit board.

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16. The circuit board as claimed in claim 15, wherein the heat sink is connected to the heat-dissipative film by means of a plurality of through holes and a fastening portion.

15 17. The circuit board as claimed in claim 15, wherein the heat sink is selected from the group consisting of a heat-conducting film and a heat-conducting sheet.

18. The circuit board as claimed in claim 12, wherein the first surface of the circuit board comprises a protrusion and the at least one heat-generating component is mounted over the protrusion of the first surface.

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19. The circuit board as claimed in claim 17, wherein the protrusion has a cutout that extends from a tip of the protrusion to the heat-generating component and optionally to the heat-dissipative film.

20. The circuit board as claimed in claim 12, wherein the heat-dissipative film is formed by a coating film made of heat-conducting material.